

Form PTO-1449

U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

ATTY. DOCKET NO.

SERIAL NO.

DM-7029

09/454,868

APPLICANT

Brown et al.

FILING DATE

12/03/99

GROUP

1614

**INFORMATION DISCLOSURE STATEMENT  
BY APPLICANT**

(Use several sheets if necessary)

**U. S. PATENT DOCUMENTS**

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB- CLASS	FILING DATE IF APPROPRIATE
56	AA 5 1 7 3 4 8 9	12/22/92	Earl et al.	514	252	
11	AB 5 4 1 4 0 0 4	05/09/95	Wilkerson et al.	514	339	

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB- CLASS	TRANSLATION YES NO
56	AC 9 7 2 3 5 9 8	07/03/97	PCT			
11	AD 9 7 2 3 6 3 2	07/03/97	PCT			
11	AE 9 9 0 7 8 3 2	02/18/99	PCT			

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)

56	AF	Shen et al., "Improved expression cloning using receptor genes and Epstein-Barr virus ori-containing vectors". (1995) <i>Gene</i> , 156:235-239.
11	AG	Sudgen et al., "A vector that replicates as a plasmid and can be efficiently selected in B-lymphoblasts transformed by Epstein-Barr virus". (1985) <i>Mol. Cell. Biol.</i> , 5:410-413.
11	AH	Yang et al., "Functional expression of two KvLQT1-related potassium channels responsible for an inherited idiopathic epilepsy". (1998) <i>J. Biol. Chem.</i> , 273(31):19419-19423.
11	AI	Charlier et al., "A pore mutation in a novel KQT-like potassium channel gene in an idiopathic epilepsy family". (1998) <i>Nature Genetics</i> , 18: 53-55.
11	AJ	Biervert et al., "A potassium channel mutation in neonatal human epilepsy". (1998) <i>Science</i> , 279:403-406.
11	AK	Singh et al., "A novel potassium channel gene, KCNQ2, is mutated in an inherited epilepsy of newborns". (1998) <i>Nature Genetics</i> , 18:25-29.
11	AL	Brown, D.A., "M-Currents: An update". (1988) <i>Trends Neurosci.</i> , 11:294-299.
11	AM	Wang et al., "KCNQ2 and KCNQ3 potassium channel subunits: Molecular correlates of the M-channel". (1998) <i>Science</i> , 282:1890-1893.
11	AN	D.A. Brown, in <i>Ion Channels</i> . T. Narahashi, Ed. (Plenum, New York, 1988), pp. 55-94.
11	AO	W.M. Yamada, C. Koch, P.R. Adams, in <i>Methods in Neuronal Modeling</i> , C. Koch and I. Segev, Eds. (Bradford, Cambridge, 1989), pp. 97-133.
11	AP	Wang, H.S. & McKinnon, D., "Potassium currents in rat prevertebral and paravertebral sympathetic neurones: control of firing properties". (1995) <i>J. Physiol.</i> , 485(2):319-335.
11	AQ	Brown, D.A. & Adams, P.R., "Muscarinic suppression of a novel voltage-sensitive K <sup>+</sup> current in a vertebrate neurone". (1980) <i>Nature</i> , 283:673-676.
11	AR	Constanti, A. & Brown, D.A., "M-currents in voltage-clamped mammalian sympathetic neurones". (1981) <i>Neurosci Lett.</i> , 24:289-294.

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Stephen Kucker

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56	AS	Storm, J.F., "An after-hyperpolarization of medium duration in rat hippocampal pyramidal cells". (1989) <i>J. Physiol.</i> , 409:171-190.
((	AT	Constanti, A. & Sim, J.A., "Calcium-dependent potassium conductance in guinea-pig olfactory cortex neurones <i>in vitro</i> ". (1987) <i>J. Physiol.</i> , 387:173-194.
((	AU	Womble, M.D. & Moises, H.C., "Muscarinic inhibition of M-current and a potassium leak conductance in neurones of the rat basolateral amygdala". (1992) <i>J. Physiol.</i> , 457:93-114.
((	AV	Wang et al., "Positional cloning of a novel potassium channel gene: KVLQT1 mutations cause cardiac arrhythmias". (1996) <i>Nature Genetics</i> , 12:17.
((	AW	Wei et al., "Eight potassium channel families revealed by the <i>C. elegans</i> genome project". (1996) <i>Neuropharmacol.</i> , 35(7):805-829.
((	AX	Sanguinetti et al., "Coassembly of K <sub>v</sub> LQT1 and minK (IsK) proteins to form cardiac I <sub>ks</sub> potassium channel". (1996) <i>Nature</i> , 384(7):80-83.
((	AY	Barhanin et al., "K <sub>v</sub> LQT1 and IsK (minK) proteins associate to form the I <sub>ks</sub> cardiac potassium current". (1996) <i>Nature</i> 384(7):78-80.
((	AZ	MacKinnon, R. & Yellon, G., "Mutations affecting TEA blockade and ion permeation in voltage-activated K <sup>+</sup> channels". (1990) <i>Science</i> , 250:276-279.
((	BA	Heginbotham, L. & MacKinnon, R., "The aromatic binding site for tetraethylammonium ion on potassium channels". (1992) <i>Neuron</i> , 8:483-491.
((	BB	Marrion et al., "Multiple kinetic states underlying macroscopic M-currents in bullfrog sympathetic neurons". (1992) <i>Proc. R. Soc. Lond., B</i> 248:207-214.
((	BC	Cassell, J.F. & McLachlan, E.M., "Muscarinic agonists block five different potassium conductances in guinea-pig sympathetic neurones". (1987) <i>Br. J. Pharmacol.</i> , 91:259-261.
((	BD	Wang, H.S. & McKinnon, D., "Modulation of inwardly rectifying currents in rat sympathetic neurones by muscarinic receptors". (1996) <i>J. Physiol.</i> , 492(2):467-478.
((	BE	Aiken et al., "Reduction of spike frequency adaptation and blockade of M-current in rat CA1 pyramidal neurones by linopirdine (DuP 996), a neurotransmitter release enhancer". (1995) <i>Br. J. Pharmacol.</i> , 115:1163-1168.

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56	BF	Lamas et al., "Effects of a cognition-enhancer, linopirdine (DuP 996), on M-type potassium currents (I <sub>K(M)</sub> ) and some other voltage- and ligand-gated membrane currents in rat sympathetic neurons". (1997) <i>Eur. J. Neurosci.</i> , 9:605-617.
11	BG	Costa, A.M.N. & Brown, B.S., "Inhibition of M-current in cultured rat superior cervical ganglia by linopirdine: Mechanism of action studies". (1997) <i>Neuropharmacol.</i> , 36:1747-1753.
11	BH	Dixon et al., "Role of the Kv4.3 K <sup>+</sup> channel in ventricular muscle". (1996) <i>Circ. Res.</i> , 79:659-668.
11	BI	Dixon, J.E. & McKinnon, D., "Potassium channel mRNA expression in prevertebral and paravertebral sympathetic neurons". (1996) <i>Eur. J. Neurosci.</i> , 8:183-191.
11	BJ	Stansfeld et al., "A physiological role for ether-à-go-go K <sup>+</sup> channels?" (1997) <i>Trends Neurosci.</i> , 20:13-14.
11	BK	Shi et al., "Identification of two nervous system-specific members of the <i>erg</i> potassium channel gene family". (1997) <i>J. Neurosci.</i> , 17(24):9423-9432.
11	BL	Shi et al., "Cloning of a mammalian <i>elk</i> potassium channel gene and EAG mRNA distribution in rat sympathetic ganglia". (1998) <i>J. Physiol.</i> , 511:675-682.
11	BM	Lampe, B.W. & Brown, B.S., "Electrophysiological effects of DuP 996 on hippocampal CA1 neurons". (1991) <i>Soc. Neurosci.</i> , Abstract No. 17:1588.
11	BN	Iannotti et al., "The expression pattern KCNQ2 splice variants in neuronal proliferation and differentiation". (1998), <i>Soc. Neurosci.</i> , Abstract No. 330.14, 24:829.
11	BO	Wang et al., "The KQT2 channel is a molecular correlate of the M-channel in sympathetic, neurons". (1998), <i>Soc. Neurosci.</i> , Abstract No. 792.1, 24:1984.
11	BP	Dworetzky et al., "Cloning and expression of mouse KCNQ2: A nervous-system specific voltage-gated potassium channel". (1998) <i>Soc. Neurosci.</i> , Abstract No. 813.1, 24:2032.
11	BQ	Gribkoff et al., "Characterization of the novel mouse brain-specific voltage-dependent potassium channel KCNQ2 expressed in xenopus oocytes and CHO cells". (1998) <i>Soc. Neurosci.</i> , Abstract No. 813.10, 24:2033.

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